



## WESTERN RESOURCE ADVOCATES

January 14, 2010

Utah Division of Water Quality  
Cannon Health Building  
288 North 1460 West  
Salt Lake City, UT 84116-3231

Re: Proposed Rule Changes to Utah Administrative Code Rules 317-1-1 and 317-2

FRIENDS of Great Salt Lake, South Shore Wetlands and Wildlife Management, Inc.,<sup>1</sup> Utah Waterfowl Association, Lakefront Duck Club, Utah Airboat, Inc., and Utah Wetlands Foundation (collectively FRIENDS) provide the following comments to the proposed rule changes to Utah Administrative Rules 317-1-1 (DAR File # 33232) and 317-2 (DAR File # 33233) contained in the December 15, 2009 Utah State Bulletin. We appreciate the work that the Division of Water Quality (DWQ) has put into formulating these rule changes and we thank the agency for taking the time to meet with members of the public to explain these proposals.

### Introduction

Pursuant to the Clean Water Act, the States are required to adopt water quality criteria, based on sound scientific rationale, that contain sufficient parameters or constituents to protect the designated use. The Environmental Protection Agency (EPA) has stated repeatedly that an effective State water quality standards program should include both parameter-specific (*e.g.*, ambient numeric criteria) and narrative approaches.

The Clean Water Act requires the States to adopt numeric criteria where doing so is necessary to protect designated uses. Numeric criteria to protect aquatic life should be developed to address both short-term (acute) and long-term (chronic) effects. Saltwater species, as well as freshwater species, must be adequately protected.

To more fully protect aquatic habitats, it is EPA policy that the States fully integrate chemical-specific, whole-effluent, and biological assessment approaches in State water quality programs.

Nutrient pollution, especially from nitrogen and phosphorus, has consistently ranked as one of the top causes of degradation in some U.S. waters for more than a decade. Excess nitrogen and phosphorus lead to significant water quality problems including harmful algal blooms, hypoxia and declines in wildlife and wildlife habitat. Excesses have also been linked to higher amounts of chemicals that make people sick.

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<sup>1</sup> South Shore Wetlands and Wildlife Management, Inc. consists of the following duck clubs: Harrison, Ambassador, Wasatch, Utah, Hill, Brown, North Point, and Ruddy.

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Nutrient pollution, generally nitrogen and phosphorus pollution, is one of the top three causes of impairment of the nation's waters. Collectively, 49 states have listed over 10,000 nutrient and nutrient-related water quality impairments. As a result, EPA, the states, and the public have placed high priority on reducing nutrient pollution through the promulgation of numeric nutrient Water Quality Standards (WQS). These standards will enable water quality assessment and watershed protection management, as well as facilitate more effective and efficient program implementation, including easier and faster development of Total Maximum Daily Loads (TMDLs) and National Pollution Discharge Elimination System (NPDES) permits. Consequently, EPA has encouraged all states to accelerate adoption of numeric nutrient WQS or numeric translators for narrative standards for all waters that contribute nutrient loadings to the Nation's waterways.

Dissolved oxygen is a basic requirement for a healthy aquatic ecosystem. Most fish and beneficial aquatic insects "breathe" oxygen dissolved in the water column. Larvae and juvenile fish are more sensitive and require even higher concentrations of dissolved oxygen. Many fish and other aquatic organisms can recover from short periods of low dissolved oxygen availability. Prolonged episodes of depressed dissolved oxygen can result in "dead" waterbodies. Oxygen concentrations in the water column fluctuate under natural conditions, but severe depletion usually results from human activities that introduce large quantities of biodegradable organic materials into surface waters.

The standard measure of the concentration of hydrogen ions is pH. A pH value of 7 represents a neutral condition. A low pH value (less than 5) indicates acidic conditions; a high pH (greater than 9) indicates alkaline conditions. Many biological processes, such as reproduction, cannot function in acidic or alkaline waters. Acidic conditions also aggravate toxic contamination problems because sediments release toxicants in acidic waters.

## **Proposed Rule Change to R317-1-1**

### ***Definition of Assimilative Capacity (1.1)***

We believe that the definition of assimilative capacity should refer to the numeric criteria and concentration of a particular pollutant parameter. Moreover, we believe the definition should be altered to indicate that an impaired water body has no assimilative capacity – e.g. where the water quality exceeds the numeric criteria. Therefore, we suggest the following:

"Assimilative Capacity" means the difference between the numeric criterion for a pollutant parameter and the concentration of that pollutant parameter in the waterbody of interest where the concentration is less than the criterion.

### ***Definition of Existing Uses (1.13)***

We believe that the definition of existing uses should utilize the word “attained” rather than “obtained.”

“Existing Uses” means those uses actually attained in a water body on or after November 28, 1975, whether or not they are included in the water quality standards.

***Definition of Great Salt Lake Impounded Wetland (1.17)***

We believe that this definition fails to specify with clarity which Great Salt Lake impounded wetlands are encompassed by the new definition and what the relation is between the new definition and the 4208’ Lake elevation that delineates the “Class 5E Transitional Waters along the Shoreline of the Great Salt Lake Geographical Boundary.” Class 5E Transitional Waters are defined as

All waters below approximately 4,208-foot elevation to the current lake elevation of the open water of the Great Salt Lake receiving their source water from naturally occurring springs and streams, impounded wetlands, or facilities requiring a UPDES permit. The geographical areas of these transitional waters change corresponding to the fluctuation of open water elevation.

R317-2-6.5(e).

We propose that the rule be rewritten to better define the relationship between Great Salt Lake impounded wetlands and Class 5E Transitional Waters. We suggest that the agency clarify whether the new definition applies to all freshwater wetlands, including those that lie below the 4208’ elevation.

**Proposed Rule Change to R317-2**

***R317-2-3 – Antidegradation Policy (3.5(b)(1))***

We believe that the example used in 3.5(b)(1) and the suggestion that the design capacity of the facility be used to determine whether a proposed project will lower water quality is inappropriate.

As you are aware, the antidegradation policy provides both a framework for protecting water quality once goals are reached, and a system for protecting the good quality of water bodies that have always met or exceeded their standards. As a result, Anti-degradation Level II review is presumptively required to determine whether the proposed activity will cause harm to existing uses or to the water quality they require. Therefore, it is only appropriate to bypass Level II review where the agency can establish conclusively that water quality will not be adversely affected by the proposed activity. As a result, we suggest that the example be deleted. There is no basis in the record or otherwise to demonstrate that in every case, the described situation will guarantee that the proposed activity will not “lower” or adversely impact water quality.

***R317-2-3 – Antidegradation Policy (3.5(b)(5))***

We strongly support the decision to delete R301-2-3.5(b)(5) and appreciate the choice to do so.

***R317-2-14 – Numeric Criteria (Table 2.14.2 Numeric Criteria for Aquatic Wildlife, Footnote 2a)***

In Footnote 2a, which states that numeric aquatic wildlife criteria for dissolved oxygen (DO) and pH would no longer apply to Great Salt Lake impounded wetlands, DWQ is proposing to delete two numeric water quality standards. These standards currently protect the aquatic life, including warm water aquatic life, waterfowl, shore birds and other water-oriented wildlife, as well as the necessary aquatic organisms in their food chain found in these internationally important wetlands. At the same time, DWQ offers no legally sufficient, alternative water quality standard to assure that these wetlands are meeting their designated uses and that point source and non-point source discharges into these wetlands are not interfering with these uses.

These impounded wetlands, composed of Waterfowl Management Areas and duck clubs, have become the most important wetland habitat for waterfowl in Farmington Bay as Great Salt Lake levels has fallen to 4194 feet above sea level. Indeed when the 4193 foot level is reached, the Great Salt Lake shoreline will be north of the Antelope Island Causeway. Farmington Bay then becomes a large mud flat containing the extended channel of the Jordan River, POTW discharges and several creeks.

DWQ's proposed rule change comes at a time when the agency has determined that many of the Great Salt Lake impounded wetlands are **not** meeting their beneficial uses – are impaired – based on the applicable DO and pH numeric criteria. Moreover, using additional methodology, the agency has confirmed that many Great Salt Lake impounded wetlands are not adequately supporting aquatic wildlife.

We have serious concerns with the statement contained within Footnote 2a that numeric standards for DO and pH are not applicable to Great Salt Lake impounded wetlands. Instead these wetlands are presumably to be protected by a narrative standard. The Footnote contains no wording to assure the timely development of alternative assessment of nutrient effects, no decision process for impairment, and no implementation plans.

We oppose removing numeric standards without the addition of language to assure the public that strong protective action will replace this loss with a deadline for its development. This language has to be at least as protective as the existing criteria which function to protect beneficial uses, to initiate recovery as soon as possible, to correct upstream quality issues through the TMDL process, and to assure continued water supply. Moreover, the language included in the Footnote must be sufficient to ensure the

shortest possible delay necessary to develop the independent scientific process used to validate the current finding of impairment of these wetlands.

We believe that the Clean Water Act prohibits DWQ's proposal to remove the numeric criteria associated with impounded wetlands without replacing those criteria with specific numeric standards that protect the designated use of those waters. The requested change runs afoul of Clean Water Act regulations. These rules require the State to adopt criteria that "contain sufficient parameters or constituents to protect the designated use" of a water body. 40 C.F.R. § 131.11(a)(1).<sup>2</sup> Further, "[s]uch criteria must be based on sound scientific rationale." *Id.* Therefore, the agency cannot eliminate existing criteria without replacing them with criteria that are both scientifically sound and adequately protective of the designated use of those wetlands.

As we have repeatedly stated, DWQ may not rely on its narrative standard to meet its Clean Water Act obligations. This is because the Act's implementing regulations additionally provide that, in establishing water quality criteria, "States **should** [e]stablish numerical values" and may rely on "narrative criteria . . . where numerical criteria cannot be established or to supplement numerical criteria." 40 C.F.R. 131.11(b) (emphasis added). DWQ's narrative standard does not contain sufficient parameters or constituents to protect the designated use of a water body. Indeed, in admitting that many of the Great Salt Lake impounded wetlands are impaired, in removing the DO and pH criteria – the very criteria that established that impairment – the agency is necessarily admitting that the narrative standard is insufficient. The narrative standard fails to identify these waters as impaired and thereby fails to protect their beneficial uses. Moreover the agency has not demonstrated in the record or elsewhere that its narrative standard is scientifically sound or that numeric criteria cannot be established for DO and pH relative to the Great Salt Lake impounded wetlands.

If DWQ proceeds with its decision to exempt Great Salt Lake impounded wetlands from the biological criteria of DO and pH, which we oppose, we suggest the following language:

These criteria are not applicable to Great Salt Lake impounded wetlands. To ensure protection of beneficial uses, the Executive Secretary shall develop an objective assessment protocol, based on sound science and with sufficient constituents and parameters that quantify the physical, chemical, and biological integrity of these waters; determine impairment

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<sup>2</sup> In its entirety, 40 C.F.R. 131.11(a)(1) provides: "States must adopt those water quality criteria that protect the designated use. Such criteria must be based on sound scientific rationale and must contain sufficient parameters or constituents to protect the designated use. For waters with multiple use designations, the criteria shall support the most sensitive use."

of beneficial uses; determine constituents causing impairment; complete a TMDL for impaired constituents; evaluate how impaired uses can be improved; be the foundation for determining water quality based standards and discharge permits; and determine appropriate mitigation for impairment that cannot be corrected within 10 years. The Executive Secretary will also assure that the Jordan River TMDL being completed delivers at a minimum the existing flows of water that meets water quality standards with a 20 percent safety factor. Depending on the uses impaired, Federal and State agencies with responsibilities for managing or enforcing laws protecting uses, private wetland owners for private lands, and the public must concur that the evaluation methods are objective and appropriate, impairment decisions are scientifically valid, and mitigation, if required, will succeed. In response to any impairment findings, with public input the Executive Secretary shall develop and initiate an implementation plan to correct identified use impairments. This protocol, these impairment decisions, and these implementation plans will also include input from local governments, the regulated community, and the general public. The assessment protocol should be completed and approved within 2 years and the implementation plan to correct any impairment should be initiated within 5 years from the date numeric standards for DO and pH are removed.

## **Conclusion**

In sum, FRIENDS requests that DWQ clarify and amend its definitions as noted above. Additionally, FRIENDS asks that DWQ eliminate the 3.5(b)(1) UPDES example and strike the proposed rule change found in R317-2, Table 2.14.2, Footnote 2a.

Thank you for this opportunity to comment on your proposed rule changes and for all you do to protect and enhance Utah's waters and the ecosystems they support.

Yours,



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